

LISTING OF CLAIMS

1 1. (Currently amended) A system for stabilizing a floating catenary anchor leg
2 mooring system used in the production of oil from subsea reservoirs comprising:

3 a hollow buoy assembly for floating on the sea surface;

4 said hollow floating buoy assembly including a cylindrical hull portion having a
5 center of gravity which is below the sea surface;

6 said cylindrical hull portion further including a ballast compartment having a
7 portion below the sea surface;

8 said ballast compartment being constructed and arranged to adjust the natural
9 pitch and roll periods of said hollow buoy assembly to reduce pitch and roll in response
10 to wind and wave forces;

11 means for providing a path for oil to travel from the subsea reservoirs to a tanker.

1 2. (Currently amended) The system for stabilizing a floating catenary anchor leg
2 mooring system as defined in Claim 1 wherein said ballast compartment is constructed and
3 arranged to be filled with sea water.

1 3. (Canceled) The catenary anchor leg mooring system as defined in Claim 1
2 wherein said ballast compartment is constructed and arranged to increase the inertia of said
3 shallow draft cylindrical hull portion to reduce the roll and pitch of said cylindrical hull portion
4 in response to wind and wave forces.

1 4. (Currently amended) The system for stabilizing a floating catenary anchor leg
2 mooring system as defined in Claim 1 wherein said cylindrical hull portion has a diameter which
3 is greater than two times its height.

1 5. (Currently amended) The system for stabilizing a floating catenary anchor leg
2 mooring system as defined in Claim 4 wherein said ballast compartment is substantially
3 cylindrical and follows the circumference of said cylindrical hull portion.